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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,905

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Isto Heiskanen

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EXAMINER

THOMPSON, CAMIE S

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

04/24/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,905	<b>Applicant(s)</b> HEISKANEN ET AL.	
	<b>Examiner</b> Camie S. Thompson	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/30/05;3/14/06</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-22 are objected to because of the following informalities: Claims 1-22 have improper Markush groups. Appropriate correction is required.
2. Claims 4-18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend upon an multiple dependent claims. See MPEP § 608.01(n).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 20-22 provide for the use of a combination of an aluminum and/or calcium compound, hydrophobic size and wet-strength size, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 20-22 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-7, 9-10 and 12-19 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/499938.

The European reference discloses a packaging material made from Prince Albert northern bleached kraft pulp wherein the pulp is refined (see page 7). The reference discloses that the packaging material is a paperboard (see page 7). The reference discloses that packaging material incorporates a sizing composition that comprises a calcium carbonate filler at 0-20 pounds per ton, 0.125 percent alkyl ketene dimer and 0-10 pounds per ton of polyamide-amine epichlorohydrin (see page 7). Claim 5 of the reference discloses a polymer coating on the sizing composition. Examples 1-3 of the reference provide for the amount of calcium carbonate, hydrophobic size and wet-strength size that reads on the present claims.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/499938 in view of Rohlf et al., U.S. Patent Number 6,489,040.

The European reference discloses a packaging material made from Prince Albert northern bleached kraft pulp wherein the pulp is refined (see page 7). The reference discloses that the packaging material is a paperboard (see page 7). The reference discloses that packaging material incorporates a sizing composition that comprises a filler, 0.125 percent alkyl ketene dimer and 0-10 pounds per ton of polyamide-amine epichlorohydrin (see page 7). The European reference does not disclose the use of alum in the composition. Rohlf discloses a wallboard made of paper wherein the wallboard comprises a composition comprising alum, alkenyl succinic anhydride (ASA) and polyamide epichlorohydrin (see column 3, line 51-column 4, line 8 and reference claim 12). The alum affects the reactivity of the sizing agent (ASA). Therefore, it would have been obvious to one of ordinary skill in the art to use alum in the European reference in order to enhance the retention and reactivity of the sizing agent.

9. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akao, U.S. Patent Number 4,784,906 in view of Penttinen et al. U.S. Pre Grant Publication 2003/0059591 and in further view of WO 01/499938.

Akao discloses a packaging material that is a multilayer which comprises a light-absorptive, light-shielding thermoplastic resin layer with 0.01 to 1% by weight of carbon black on the inner layer and an outer layer comprising a light reflective, light-shielding as the outer layer (see abstract). Additionally, the reference discloses that the light reflective layer comprises titanium dioxide (see column 6, lines 7-54). Also, the reference discloses that the light reflective material

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is present in the amount of 0.01 to 15 weight percent. The reference also discloses that the light reflective layer. The reference discloses that the polymer layers can comprise polypropylene (see column 5, line 65-column 6, line 6). It is disclosed in column 8, lines 1-23 that the one or more flexible sheet layers are laminated onto the film. The reference discloses that the flexible sheet can be paper. Figures 3, 4 and 19 of the reference disclose bleached kraft paper sandwiched between a light-shielding resin layer and a light reflective resin layer. It is disclosed in column 9, lines 3-4 that the packaging material can be used for packaging food. Akao does not disclose a grey tint in the inner polymer layer as per instant claims 5 and 14-15. Penttinen discloses a multi-layer heat-sealable packaging material. Penttinen also discloses that the packaging material comprises a fibrous base with two polymeric materials on both sides of the fibrous base with the innermost polymeric layer comprises white pigment (see abstract, Figures and paragraph 0023). Additionally, Penttinen discloses that the innermost layer is tinted grey by mixing black pigment with white pigment (see paragraph 0011). The grey tint makes the appearance of aluminum foil. The grey tint makes the packaging material more acceptable for market use. Therefore, it would have been obvious to one of ordinary skill in the art to have the grey tint for the innermost layer of the Akao reference so that the packaging material is aesthetically pleasing to the consumer. Akao does not disclose an oxygen barrier layer. Penttinen discloses an oxygen barrier layer comprised of EVOH or polyamide (see abstract and paragraph 0015). The oxygen barrier layer protects against visible light and other foreign materials. Therefore, it would have been obvious to one of ordinary skill in the art to use an oxygen barrier layer between the polymeric layer and the fibrous base in order to have a packaging material that protects the contents from degradation. Neither reference discloses the

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package is treated with a sizing composition. The European reference discloses a packaging material made from Prince Albert northern bleached kraft pulp wherein the pulp is refined (see page 7). The reference discloses that the packaging material is a paperboard (see page 7). The reference discloses that packaging material incorporates a sizing composition that comprises a calcium carbonate filler at 0-20 pounds per ton, 0.125 percent alkyl ketene dimer and 0-10 pounds per ton of polyamide-amine epichlorohydrin (see page 7). Claim 5 of the reference discloses a polymer coating on the sizing composition. Examples 1-3 of the reference provide for the amount of calcium carbonate, hydrophobic size and wet-strength size that reads on the present claims. The addition of a sizing composition to a packaging material affects penetration of the packaging material. Therefore, it would have been obvious to one of ordinary skill in the art to provide the sizing composition of the European reference onto the Akao packaging material in order to inhibit liquid penetration into the packaging material.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached at (571) 272-1478. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Milton I. Cano/

Supervisory Patent Examiner, Art Unit 1794